#MakerFun DAILY CHALLENGE

Join us every week day at 10am AST for a new Make-At-Home activity & 1pm AST for an Outdoor activity for a Digital Learning skill while schools are closed.

HOW TO CREATE TEACHABLE MOMENTS FOR KIDS

A teachable moment is an unplanned, or intentionally placed, learning opportunity. These can happen anywhere and at anytime. They provide parents, guardians, and teachers the chance to help children learn new concepts and deepen their understanding of previously acquired knowledge. This can also be very useful when considering the design process as students can be more informed as they develop future iterations.

Parents, guardians and teachers have learned to watch for these moments. They listen and pay close attention ready to pounce with questions or thoughtful discussion at any time. We can create these moments especially when kids are working on a project or doing their homework by asking open ended questions. More importantly we need to be ready to explain and discuss the 'why' behind the child's answer and encourage them to research and dig deeper. This 'why' is the key to creating the teachable moment to better decode the world they live in.

Sometimes these questions and discussions can lead to questions that adults can't answer and this is the golden opportunity to model how to learn instead of what to learn! When you don't have the answer it gives kids the chance to learn alongside you: "That's a great question! Let's look it up together!" This builds confidence because it's ok that we don't always have all the answers. More importantly, it gives kids the sense of pride to learn that we are all life-long-learners.

MATH INSPIRED WHIMSY
TEACHABLE MOMENT QUESTIONS

Our DNA is our genetic code. How can our biological form be transformed into a machine-computer using algorithms?

Bring math skills in the kitchen and come up with your own formulas. Look up recipes and challenge yourself to solve different problems on temperature conversion, measuring ingredients and cooking time. What is the process to increase or decrease the portions in a recipe?

What are some other ways that you think math and art have influenced one another?

Learn about the American artist Sol LeWitt (1888-1976) and explore linear equations using visual art. Follow is written instructions requiring you to graph a variety of colored lines in all four quadrants of a grid.

How do you solve algebraic equations? How do you isolate variables in equations? What order will you follow?

What 2 variable algebra equations will you use for this art project? For example: $(2x + 1 = y)$ or $(x = 3 + y)$ or ...Using a dice, you could yield the numbers 1, 2, 3, 4, 5, or 6. On a piece of paper determine what color each number represents? For example: 1=red, 2=orange, 3=blue, ...For example if you roll a 3 and you decide to replace the variable x. This would mean y = 7. You would then need a 7 cm (y variable) piece of blue paper strip (x variable).

Invent a song and dance to help you remember math formulas. Use music to learn your multiplication tables.When playing your favorite musical instrument, think about sequencing and repetition. These are important skills for algorithmic thinking.

Think and share examples of algebra in everyday life? How many can you find? Can you describe the steps to solving equations?Learn about the American artist Sol LeWitt (1888-1976) and explore linear equations using visual art. Write instructions to graph a variety of colored lines in a grid. How could you share this information with others?

Each and every sport involves algebra in one way or another. Calculate the force and distance to score a goal or estimate the speed required to cover the distance to reach the endpoint of the sport of your choice.

How could the materials used in this projectdiffer from culture to culture or different locations in the world? What other materials could be used instead of paper to make the design? How could the overall design be different?

Seek out opportunities to enrich your tech skills. Take on design and coding challenges from Brilliant Labs. Follow technology innovation blogs.Inspire other kids, by volunteering at a local coding club or help out at one of the elementary schools and share your tech knowledge.